

REMARKS

The Official Action of 25 June 2007 has been carefully considered and reconsideration of the application as amended is respectfully requested.

Applicants hereby affirm their election to prosecute in the present application the claims of Group VII. Claims 1-11 have now been rewritten as new claims 12-31, all of which read on the elected invention. The recitations of the new claims correspond with the recitations in the original claims and/or draw support from the specification as filed at, for example, page 3, last paragraph and page 5, first paragraph (selective passivation of the external surface of the catalyst); page 5, fourth paragraph (passivation by selective in-situ deposition of silica) and Table 3 on page 12 (improved yield and selectivity of picoline with catalyst with surface passivation).

The claims as rewritten are respectfully believed to be free of the informalities noted at paragraph 5 of the Official Action, and are otherwise believed to be sufficiently definite to satisfy the dictates of 35 USC 112, second paragraph.

With respect to the rejection raised in paragraph 7 of the Official Action, the carbonyl compound of the claims now of record are all limited such that the rejection for alleged violation of the enablement requirement of 35 USC 112, first paragraph is respectfully believed to have been overcome. Applicants respectfully submit that one of skill

in the art could routinely practice the invention defined in any of the claims now of record without undue experimentation.

The claims stand rejected under 35 USC 102(b) as allegedly being anticipated by each of Iwamoto and Goe or under 35 UCS 103(a) as allegedly being unpatentable over Iwamoto. Applicants respectfully traverse these rejections.

The claimed invention is based at least in part upon Applicants' finding that, in the preparation of a picoline with a titanium-silicate catalyst, the activity and selectivity of the catalyst in producing the desired product can be surprisingly improved by passivating the external surface of the catalyst. This is in turn based upon Applicants finding that, in addition to the chemical characteristics of zeolites, the physical and morphological nature of the crystals also significantly influence the activity, selectivity and productivity of the catalyst in the claimed reaction.

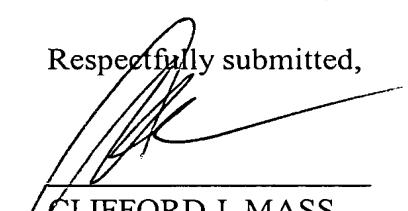
The improved activity and selectivity with the claimed surface-passivated catalyst can be seen with reference to the Examples in the specification. In particular, Table 3 on page 12 provides a comparison of Catalyst A (prepared as described in Example 1 on pages 8-9) and Catalyst B (prepared as described in Example 2 on page 9) with surface-passivated Catalysts A and B (prepared as described in Example 6 on page 11). As can be seen from Table 3, the claimed surface-passivated catalyst provides a higher yield and selectivity for picoline than does the nonsurface-passivated catalyst.

The cited references do not show or suggest a surface-passivated catalyst or the surprising improvements that can be achieved therewith. Iwamoto et al cite Goe et al in their specification and state that the yield of pyridine produced by conventional methods (i.e. those described in Goe et al) is low and hence they try to overcome this problem. Iwamoto et al teach a catalyst comprising Ti and/or Co along with Silica as Zeolite constituent, having MFI or MEL zeolite framework preferably loaded with Pb, Ti, etc, and they contact this catalyst with an aldehyde or ketone and ammonia in gas phase in the temperature range of 300-700°C to obtain pyridine and picolines. They do not show or suggest the use of surface passivated titanium sitlcate catalysts used in the claimed process to obtain a higher yield of or selectively for picolines.

In view of the above, Applicants respectfully submit that the cited references cannot be used to articulate any rationale with rational underpinnings that would support a rejection of the invention as defined in the claims now of record. This being the case, Applicants respectfully submit that the prior art rejections of record should be withdrawn.

Accordingly, the application is now believed to be in allowable form. An early notice of allowance is earnestly solicited and is believed to be fully warranted.

Respectfully submitted,



CLIFFORD J. MASS  
LADAS & PARRY LLP  
26 WEST 61ST STREET  
NEW YORK, NEW YORK 10023  
REG. NO.30,086(212)708-1890